REMARKS

Claims 1-3, 19-20, 47-53, and 67-70 are pending in the instant application. Claim 1 was amended to clarify the claim. Claims 2 and 3 were canceled and the subject matter re-written as newly added claims 71-73. Claims 19 and 20, and 67 were canceled and re-written as claims 74-79, and 80 so as not to depend from a canceled claim and to provide proper dependency on newly added claims 71-73. In order to simplify the issues, expedite prosecution, and to pursue certain embodiments of the invention, claims 47-53 and 68-70 were amended to provide for multimeric receptor complexes, without prejudice to the prosecution the cancelled subject matter in a subsequent application. Dependent claims 81-85 were added to provide a claims of various scope encompassed by the present invention; said claims are supported throughout the specification and claims (e.g., including original claims 19, 20, 47, 51, and 70). No new matter was added by these amendments. Applicant believes the case is in condition for allowance. An Appendix with clean versions of the instant claim set is provided for the Examiner's convenience, and shall not be construed as submission of a re-presented claim set under 37 CFR §1.121.

A. Priority and Information Disclosure Statement Issues from March 24, 2003 Office Action (OA)

(1) Priority

Regarding priority documents, the Office states that provisional applications 60/232,219 (99-93P2; filed 09/12/00) and 60/244,610 (99-93P3; filed 10/31/00) provide written support for all the claims i.e., claims 1-3, 19-20, 47-53, and 67-70, pending in the instant application. However the Office believes that provisional application 60/169,049 (99-93P1; filed 12/03/99) "does not appear to provide written support for claims 47-53 and 68-70 with respect to limitations regarding the nature of the receptor complex (homodimeric, heterodimeric, etc.). Applicant is invited to point to adequate written support for these claims in the provisional application" (OA, p. 2) Applicant respectfully disagrees with the Office, as the provisional application 60/169,049 (99-93P1; filed 12/03/99) indeed provides adequate written support regarding the nature of the receptor complex and hence provides adequate written support for the

claims; the instant claims 47-53 and 68-70 are drawn to "multimeric" receptors, and the 60/169,049 priority application, filed 12/03/99, provides clear written support therefore. Consequently, Applicant's claim for domestic priority under 35 USC §119(e) for the instant claims should be acknowledged.

The 60/169,049 application, filed 12/03/99, provides clear written support for zcytor16 receptor complexes comprising multimeric receptors. The specification clearly describes zcytor16 as an "extracellular domain of a new class II cytokine receptor" (e.g., page 2, line 16-17). The specification when describing purifying the cytokine receptor polypeptides of the present invention states: "Zcytor16 polypeptides may be monomers *or multimers*; glycosylated or non-glycosylated; PEGylated or non-PEGylated; and may or may not include an initial methionine amino acid residue." (page 54, lines 17-19, emphasis added) In addition, the specification provides that: "The term "receptor" denotes a cell-associated protein that binds to a bioactive molecule termed a 'ligand.' This interaction mediates the effect of the ligand on the cell. Receptors can be membrane bound, cytosolic or nuclear; monomeric (*e.g.,* thyroid stimulating hormone receptor, beta-adrenergic receptor) *or multimeric* (*e.g.,* PDGF receptor, growth hormone receptor, IL-3 receptor, GM-CSF receptor, G-CSF receptor, erythropoietin receptor and IL-6 receptor)." (page 10, lines 3-13; emphasis added) Applicant has pointed to adequate written support for the limitations of the claimed receptor complexes in the provisional application as requested by the Office. The Office has not provided any evidence or basis for the assertion that zcytor16-comprising multimers are not included in the provisional application and hence has not provided any basis for the assertion denying priority of claims 47-53 and 68-70 back to December 3, 1999. Consequently, the rejection of claims 47-53 and 68-70 priority claim should be properly withdrawn, Applicant's claim for domestic priority under 35 USC §119(e) for the instant claims should be acknowledged and the priority should be properly dated back to December 3, 1999.

Applicant believes that the 60/169,049 priority application also provides adequate written support for heterodimeric and homodimeric zcytor16 receptors because multimeric receptors are known to include heterodimeric and homodimeric forms, and it was well known in the art at the time the 60/169,049 priority application was filed that class II cytokine receptors

form homodimeric, heterodimeric and other multimeric complexes. However, insofar as the instant application, the point is moot, as Applicant has chosen to pursue those embodiments in a separate application.

(2) IDS

The Office notes that an IDS had not been filed in this case. Applicant notes that an IDS was filed on April 24, 2003.

B. Objections Addressed from March 24, 2003 Office Action (OA)

(1) Objection of the Specification

The specification was objected to "because it contains an embedded hyperlink...on page 166 at line 22." (OA, p. 2). Applicant has amended the paragraph to exclude the reference to the hyperlink, and believes that the specification no longer contains an improper incorporation by reference. Consequently, Applicant requests that this objection be properly withdrawn.

(2) Objection of Claims1-3 for informalities

Claims 1-3 were objected to because "amino acid residues' was duplicated in subsection (a) of the claims (OA, p. 3). As Applicant has canceled claims 2-3, this objection is moot as applied thereto. Applicant has amended the claims to correct the error. Consequently, the objection of claim 1 should be properly withdrawn.

C. Rejections Addressed from March 24, 2003 Office Action (OA)

(1) Rejection of claims 1-3, and 19-20 under 35 U.S.C. § 112, second paragraph

Claims 1-3 and 19-20 were rejected under 35 USC §112, second paragraph, "as being indefinite for failing to particularly point out and distinctly claims the subject matter which applicant regards as the invention" (OA., p.3) Applicant has cancelled claims 2-3 and dependent claims 19-20, and has captured the subject matter in newly added claims 71-73, and dependent claims 74-79. Applicant has amended the claim 1 to provide clarity to the claim. Applicant

believes this rejection is rendered moot as applied to the instant claims. Consequently, the rejection of claim 1, and as may apply to claims 71-79 should be properly withdrawn.

The Office was concerned with the "openness" of the claim language of claim 1. Applicant has amended the claim to more clearly define the metes and bounds of the fragment polypeptides claimed. The instant claims are drawn to polypeptides consisting of fragments of SEQ ID NO:2 wherein those fragments comprise at least 15 amino acids up to the length of the specific fragments of SEQ ID NO:2 defined in the claim. Such fragments are within the scope of the invention, since peptide fragments of at least 15 amino acids of SEQ ID NO:2, as well as larger defined fragments and domains such as defined in subsection (a) – (g) of the claim, are useful, for example, to generate antibodies against the novel and useful polypeptides of the present invention (e.g., page 43, line 11 to page 44, line 15; and page 73, lines 24-31; Examples 4-5). Applicant has amended the claim to more clearly define that the fragments comprising at least 15 amino acids are within SEQ ID NO:2. No new matter was added by these amendments. Applicant believes the claim particularly points out and describes the subject matter of the invention. Consequently, the rejection of claim 1 under 35 USC §112, second paragraph should be properly withdrawn.

The Office was concerned that the remaining claims 2-3, cited amino acid residues without providing a reference SEQ ID NO. Newly added claims 71-75 provide said reference SEQ ID NO. Claims 71-73 and dependent claims 74-79 particularly point out and describe the subject matter of the invention. Consequently, the rejection as may apply to claims 71-79 under 35 USC §112, second paragraph should be properly withdrawn.

(2) Rejection of claims 50, 67 and 69 under 35 U.S.C. § 112, first paragraph (new matter)

Claims 50, 67 and 69 were rejected under 35 USC §112, first paragraph because the Office believes that the claims contain "new matter" in the form of "written description [for] a polypeptide or receptor complex that further comprises a biotin/avidin label, radionuclide, an enzyme, a substrate, a cofactor, an inhibitor, a fluorescent marker, a chemiluminescent marker, or a cytotoxic molecule. While it is acknowledged that these limitations do appear in the specification (e.g., on page 95), the Examiner was only able to identify support for an antibody "

(OA, p.4). Applicant has redrafted claim 67 as claim 80 to provide proper dependency. Applicant respectfully traverses this rejection. Such polypeptides described in claims 50, 69, and 80 are indeed supported in the specification and are not new matter.

It is well understood in Patent Law that "information contained in any one of the specification, claims, or drawings of the application as filed may be added to any other part of the application without introducing new matter." MPEP 2163.06. Applicant has described the polypeptides and receptor complexes of the present invention in the specification (e.g., see specification and original claims). Applicant has described polypeptides and receptor complexes of the present invention that comprise affinity tags, chemical moieties, toxins, or labels (e.g., see original claim 50). As detailed below, Applicant has described in the specification as filed the biotin/avidin labels, radionuclides, enzymes, substrates, a cofactors, inhibitors, fluorescent markers, a chemiluminescent markers, and cytotoxic molecules that are described in described in claims 50, 69, and 80. Hence, there has been no new matter introduced into these claims. The Office has not pointed to any new language or information in the instant claims which was not included in the application as filed; nor has the Office provided a basis in law as to why such biotin/avidin labels, radionuclides, enzymes, substrates, a cofactors, inhibitors, fluorescent markers, a chemiluminescent markers, and cytotoxic molecules are not encompassed by the present invention and comprise new matter. Because the information is indeed contained in any one of the specification, claims, or drawings of the application as filed, it may be added to any other part of the application without introducing new matter. Consequently, no new matter has been added to claims 50, 69, and 80.

Polypeptides and receptor complexes of the present invention that comprise a variety of affinity tags, chemical moieties, toxins, or labels are clearly contemplated and described in the specification (e.g., see, original claim 50 and throughout the specification). In addition, Applicant has *clearly described* ***polypeptides*** *(including zcytor16 polypeptides, binding polypeptides, and antibodies) that include* biotin/avidin labels, radionuclides, enzymes, substrates, a cofactors, inhibitors, fluorescent markers, a chemiluminescent markers, and cytotoxic molecules throughout the specification, for example, including but not limited to:

(a) zcytor16 polypeptides (e.g., see 17, lines 13-25 (includes polypeptides, polypeptides (e.g, known in the art as enzymes) that provide attachment to substrates); page 41, lines 11-12 (labeling zcytor16 polypeptides with biotin/avidin (Biotin) and a fluorescent or chemiluminescent marker (FITC)); page 62, lines 27-30; page 65, lines 18-24; page 67, lines 4-9 (substrate, cofactor, chemical moiety); Page 67, lines 13-18 (photoaffinity labeling, of zcytor16); page 68, lines 1-30 (various moieties); Examples 1 [p. 130], 3 [p.134], 7 [p.138], 8 [p. 140], and 11 [p.144] (zcytor16 Fc and other polypeptide tags, enzymes (e.g., MBP), immunoglobulin);

(b) antibody polypeptides and binding polypeptides (e.g., page 17, lines 9-12 (detectable labels including drugs, toxins, immunomodulators, chelators, boron compounds, photoactive agents or dyes, and radioisotopes); page 91, line 14 to 92, line 31 (conjugates for antibodies); page 94, lines 14-17 (conjugates for binding polypeptides, i.e., not limited to antibodies); page 95, lines 14-18 (suitable tags and labels); page 96 line 13 to page 97, line 8 (detectable molecules on binding polypeptides, i.e., not limited to antibodies);

(c) furthermore, nucleic acids (e.g., page 82, lines 20-25 (use of radionuclides, chemiluminescent substrates and other moieties such as biotin, etc); page 90, lines 1-4 (detectable labels on nucleic acids, i.e., not limited to antibodies)).

Applicant emphasizes by pointing to areas in the specification as filed, that these various types of labels are known in the art and described in the specification to be non-limiting. That is, such labels, etc., can be used amongst a variety of polypeptides (e.g., antibodies and other polypeptides such as binding polypeptides and zcytor16 polypeptides), and as emphasized above are described in the specification interchangeably on different types of molecules for example, amongst various types of polypeptides (e.g., zcytor16 polypeptides, antibodies, and binding polypeptides) as well as nucleic acids. Because the information is indeed contained in any one of the specification, claims, or drawings of the application as filed, it may be added to any other part of the application without introducing new matter. The zcytor16 polypeptides and receptor complexes of the present invention that further comprise "biotin/avidin labels, radionuclides, enzymes, substrates, cofactors, inhibitors, fluorescent markers, chemiluminescent markers, and cytotoxic molecules" amongst other labels, tags, and moieties were contemplated, described in the specification, are within the reasonable scope of the invention, and are not considered new matter.

Applicant has clearly described polypeptides (including zcytor16 polypeptides, binding polypeptides, and antibodies) that comprise affinity tags, chemical moieties, toxins, labels, biotin/avidin labels, radionuclides, enzymes, substrates, cofactors, inhibitors, fluorescent markers, chemiluminescent markers, and cytotoxic molecules that are encompassed by the claims. Moreover, it is well known in the art described in the specification, and undisputed by the Office, for the Office has provided no evidence to the contrary, that affinity tags, chemical moieties, toxins, or labels such as chemical moieties, toxins, labels, biotin/avidin labels, radionuclides, enzymes, substrates, cofactors, inhibitors, fluorescent markers, chemiluminescent markers, and cytotoxic molecules such as those described in the application as filed that can be placed on one polypeptide (e.g., an antibody) can be placed on another (e.g., a zcytor16 polypeptide or receptor complex of the present invention). Applicant has identified the language and information in the application as filed that supports claims 50, 69, and 80; however, the Office has not provided a citation in law or in the MPEP to provide a basis as to why this language in claims 50, 69, and 80 consists of new matter. Applicant invites the Office to provide the proper citation in law or the MPEP which shows that claims 50, 69, and 80 comprise new matter. Because the information is indeed contained in any one of the specification, claims, or drawings of the application as filed, it may be added to any other part of the application without introducing new matter. The zcytor16 polypeptides and receptor complexes of the present invention that further comprise said biotin/avidin labels, radionuclides, enzymes, substrates, cofactors, inhibitors, fluorescent markers, chemiluminescent markers, and cytotoxic molecules was contemplated, described in the specification, are within the reasonable scope of the invention, and are not considered new matter. Consequently, as no new matter has been introduced into claims 50, 69, and 80, the rejection should be properly withdrawn.

(3) Rejection of claims 1-2, 47-53, 67-69 under 35 U.S.C. § 112, first paragraph (Written Description)

Claims 1-2, 47-53, and 67-69 were rejected under 35 U.S.C. § 112, First Paragraph, as "containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the

application was filed had possession of the claimed invention." (OA, p. 4). As claim 2 canceled and the subject matter re-drafted in claims 71 and 72, this rejection will be addressed as may apply thereto. Applicant traverses this rejection as applied to instant claims 1, 47-53, and 67-69, and as it may apply to newly added claims 71-72, 74-77, and 80-83.

In making this rejection, the Office states:

> The claims are drawn to a large genus of polypeptides sharing one of the core sequences set forth in subsections...of the claim. Fragment language that encompasses open (comprising) claim language permits an unidentified number of flanking sequences...and no requirement that these sequences share any function. (OA, p.4)

Although Applicant believes that functional elements of SEQ ID NO:2, for example, fragments comprising residues 22-108, 112-210, 21-110, 21-210, 22-210, 22-210 contains are adequately described in the specification, Applicant has chosen to pursue subject matter of those claims in a subsequent application. The instant claims are drawn to (a) polypeptides comprising full-length (residues 1-231) SEQ ID NO:2, and the mature zcytor16 polypeptide comprising amino acid residues 22-231 or 21-231 of SEQ ID NO:2 (claims 71, 74-75, 80, 82-83); (b) receptor complexes comprising full-length SEQ ID NO:2, and the mature zcytor16 polypeptide comprising amino acid residues 22-231 or 21-231 of SEQ ID NO:2 (claims 47-53, 68-70, 84-85); or (c) polypeptides consisting of full-length SEQ ID NO:2, and the mature zcytor16 polypeptide of amino acid residues 22-231 or 21-231 of SEQ ID NO:2 or defined fragments of SEQ ID NO:2 (claims 1, 72-73, 76-79, and 81).

As detailed below, Applicant provides evidence that the full-length, mature polypeptides and fragments thereof, and receptor complexes comprising the full-length and mature polypeptides of the present invention are adequately described in the specification, demonstrating that Applicant had possession of the invention. Applicant has provided working examples of the full-length and mature zcytor16 polypeptides, fragments and multimers, and has demonstrated biological activity of the full-length and mature polypeptides as demonstrated by actual experimental data described in the specification.

Both full-length SEQ ID NO:2 and all the fragments of SEQ ID NO:2, including the mature fragments, that are within the scope of the claims are described verbatim in the

specification, and are hence described in the specification in such a way as to convey that Applicant had possession of the invention at the time the application was filed. Applicant has provided disclosure of defined structural features (e.g., secretory signal peptide, mature polypeptide, FnIII domains, cytokine-binding domain) that are correlated to function through use of examples of active isolated full length, mature and protein fragments (for example, activity of expressed receptors, soluble receptors and fusion proteins comprising cytokine binding domains of the present invention, and generation of antibodies) as well as described receptor complexes comprising the zcytor16 polypeptides of the present invention. For example, see, page 2, line 21 to page 4, line 4; Table 4, page 43; page 54, lines 19-29; page 58, lines 15-29; page 60, lines 16-30; page 73, line 24, to page 75, line 12; SEQ ID NO:2; throughout the specification, and for example, Examples 4-8, 10, 16, 22, and 23.

Moreover, Applicant has demonstrated the activity of the full-length zcytor16 polypeptide of SEQ ID NO:2 and functional fragments, such as one mature form of the zcytor16 polypeptide comprising amino acids 22-231 of SEQ ID NO:2. Moreover, the examples, and well as the specification itself demonstrate that Applicant has shown clear biological activity of polypeptide fragments, tagged fragments, as demonstrated by e.g., binding and antagonist activity of zcytor16 soluble receptors on IL-TIF (e.g., see Examples 10, 16, 22, 23).

Clearly, one of skill in the art upon reading the specification and claims would readily recognize that Applicant was in possession of the polypeptides of the claimed invention at the time the application was filed. This is all that written description requirement of 35 U.S.C. §112, first paragraph, requires. Applicant believes that the Office has no basis for the rejection of instant claims. Consequently, Applicant requests that the rejection of claims 1, 47-53, and 67-69, and as it may apply to newly added claims 71-72, 74-77, and 80-83 be properly withdrawn.

(4) Rejection of claims 1-2, 47-53, 67-70 under 35 U.S.C. § 112, first paragraph (Enablement)

Claims 1-2, 47-53 and 67-70 were rejected under 35 U.S.C. §112, First Paragraph because "the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate with these claims." (OA, p. 6). As claim 2 canceled and the subject matter re-drafted in claims 71 and 72,

this rejection will be addressed as may apply thereto. Applicant traverses this rejection as applied to instant claims 1, 47-53, and 67-70, and as it may apply to newly added claims 71-83.

In making this rejection, the Office states:

[T]he specification, while being enabling for a polypeptide, or for a receptor complex comprising a polypeptide, that (a) comprises the amino acid sequence set forth in SEQ ID NO:2, (b) comprises amino acid residues 22-231 or 21-231 of SEQ ID NO:2 wherein the polypeptide binds IL-TIF...or (c) consists of SEQ ID NO:2 or internal fragments of SEQ ID NO:2; [it] does not reasonably [provide enablement for a polypeptide, or for a receptor complex comprising a polypeptide, that (a) comprises fragments of SEQ ID NO:2 that do not bind IL-TIF..., or (b) comprises a fragment of SEQ ID NO:2 smaller than residues 22-231 of SEQ ID NO:2. (OA, p. 6)

Although Applicant believes that functional elements of SEQ ID NO:2, for example, fragments comprising residues 22-108, 112-210, 21-110, 21-210, 22-210, 22-210 contains are clearly enabled by the specification, Applicant has chosen to pursue subject matter of those claims in a subsequent application. The instant claims are drawn to (a) polypeptides comprising full-length (residues 1-231) SEQ ID NO:2, and the mature zcytor16 polypeptide comprising amino acid residues 22-231 or 21-231 of SEQ ID NO:2 (claims 71, 74-75, 80, 82-83); (b) receptor complexes comprising full-length SEQ ID NO:2, and the mature zcytor16 polypeptide comprising amino acid residues 22-231 or 21-231 of SEQ ID NO:2 (claims 47-53, 68-70, 84-85); or (c) polypeptides consisting of full-length SEQ ID NO:2, and the mature zcytor16 polypeptide comprising amino acid residues 22-231 or 21-231 of SEQ ID NO:2 or defined fragments of SEQ ID NO:2 (claims 1, 72-73, 76-79, and 81).

As detailed below, Applicant provides evidence that the full-length, mature polypeptides and fragments thereof, and receptor complexes comprising the full-length and mature polypeptides of the present invention are enabled by the specification. Applicant has provided working examples of the full-length and mature zcytor16 polypeptides, fragments and multimers, and has demonstrated biological activity of the full-length and mature polypeptides as demonstrated by actual experimental data described in the specification. As such, Applicant believes that the Office did not appreciate the entire disclosure in making the instant enablement rejection.

Both full-length SEQ ID NO:2 and all the fragments of SEQ ID NO:2, including mature forms, that are within the scope of the claims are described verbatim in the specification in a manner so that one of skill in the art can make and use the polypeptides of the present invention. As such, the invention is enabled by the specification. Applicant has provided disclosure of defined structural features (e.g., secretory signal peptide, mature polypeptide, FnIII domains, cytokine-binding domain) that are correlated to function through use of examples of active isolated full length, mature and protein fragments (for example, activity of expressed receptors, soluble receptors and fusion proteins comprising cytokine binding domains of the present invention, and generation of antibodies) as well as described receptor complexes comprising the zcytor16 polypeptides of the present invention. For example, see, page 2, line 21 to page 4, line 4; Table 4, page 43; page 54, lines 19-29; page 58, lines 15-29; page 60, lines 16-30; page 73, line 24, to page 75, line 12; SEQ ID NO:2; throughout the specification, and for example, Examples 4-8, 10, 16, 22, and 23.

Applicant has demonstrated the activity of the full-length zcytor16 polypeptide of SEQ ID NO:2 and functional fragments, such as one mature form of the zcytor16 polypeptide comprising amino acids 22-231 of SEQ ID NO:2. Moreover, the examples, and well as the specification itself demonstrate that Applicant has shown clear biological activity of polypeptide fragments, tagged fragments, as demonstrated by e.g., binding and antagonist activity of soluble zcytor16 receptors on IL-TIF (e.g., see Examples 10, 16, 22, 23).

The instant specification provides sufficient disclosure and guidance for one of skill in the art to make and use the polypeptides of the present invention without undue experimentation, which is all the enablement requirement of 35 USC §112, first paragraph, requires. Consequently, Applicant respectfully requests that, the rejection of claims 1, 47-53, and 67-70, and as it may apply to newly added claims 71-83, be properly withdrawn.

(5) Rejection of claims 47-50 under 35 U.S.C. § 102(e)

Claims 47-50 were rejected under 35 U.S.C. §102(e) as being anticipated by Agarwal et al. (WO 01/198342, December 27, 2001). Applicant respectfully submits that the

Agarwal et al. reference is not available as prior art under 35 U.S.C. §102(e). As such, Applicant requests that the rejection of claims 47-50 be properly withdrawn.

Instant claims 47-50 are drawn to "multimeric" zcytor16 receptors. As detailed in Part A.(1) above the 60/169,049 application, filed 12/03/99, provides clear written support for zcytor16 receptor complexes comprising multimeric receptors back to a priority date of December 3, 1999. Consequently, the subsequently filed Agarwal et al. reference is not available as prior art under 35 U.S.C. §102(e). Consequently, Applicant requests that the rejection of claims 47-50 be properly withdrawn.

Early reconsideration and allowance of the pending claims is respectfully requested. If the Patent Examiner believes that a telephone interview would expedite prosecution of this patent application, please call the undersigned at (206) 442-6676.

Respectfully Submitted,

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Enclosures:

Petition and Fee for 3 Month Extension of Time (in duplicate)

Amendment Fee Transmittal (in duplicate)

Appendix (4 pages)

Postcard

APPENDIX

Claim Set with Amended Claims

CLAIMS

I claim:

1. An isolated polypeptide consisting of a fragment of SEQ ID NO:2, wherein the polypeptide fragment comprises at least 15 contiguous amino acid residues of an amino acid sequence of SEQ ID NO:2 selected from the group consisting of: (a) amino acid residues 21 to 231 of SEQ ID NO:2, (b) amino acid residues 21 to 210 of SEQ ID NO:2, (c) amino acid residues 22 to 231 of SEQ ID NO:2, (d) amino acid residues 22 to 210 of SEQ ID NO:2, (e) amino acid residues 22 to 108 of SEQ ID NO:2, (f) amino acid residues 112 to 210 of SEQ ID NO:2, and (g) amino acid residues 21 to 110 of SEQ ID NO:2.

47. An isolated soluble cytokine receptor polypeptide comprising a sequence of amino acid residues as shown in SEQ ID NO:2 from amino acid 22-231, wherein the soluble cytokine receptor polypeptide forms a multimeric receptor complex.

48. An isolated polypeptide according to claim 47, wherein the soluble cytokine receptor polypeptide forms a multimeric receptor complex further comprising a soluble Class I or Class II cytokine receptor.

49. An isolated polypeptide according to claim 47, wherein the soluble cytokine receptor polypeptide forms a multimeric receptor complex comprising a soluble CRF2-4 receptor polypeptide (SEQ ID NO:35), a soluble IL-10 receptor polypeptide (SEQ ID NO:36), or soluble zcytor11 receptor polypeptide (SEQ ID NO:34).

50. An isolated polypeptide according to claim 47, wherein the soluble cytokine receptor polypeptide further comprises an affinity tag, chemical moiety, toxin, label,

biotin/avidin label, radionuclide, enzyme, substrate, cofactor, inhibitor, fluorescent marker, chemiluminescent marker, toxin, cytotoxic molecule or an immunoglobulin Fc domain.

51. An isolated multimeric soluble receptor complex comprising soluble receptor subunits, wherein at least one of the soluble receptor subunits comprises a soluble cytokine receptor polypeptide comprising a sequence of amino acid residues as shown in SEQ ID NO:2 from amino acid 22-231.

52. An isolated multimeric soluble receptor complex according to claim 51, further comprising a soluble Class I or Class II cytokine receptor polypeptide.

53. An isolated multimeric soluble receptor complex according to claim 51, further comprising a soluble CRF2-4 receptor polypeptide (SEQ ID NO:35), a soluble IL-10 receptor polypeptide (SEQ ID NO:36), or soluble zcytor11 receptor polypeptide (SEQ ID NO:34).

68. An isolated soluble cytokine receptor polypeptide receptor complex comprising a sequence of amino acid residues as shown in SEQ ID NO:2 from amino acid 22-231.

69. The isolated soluble cytokine receptor polypeptide receptor complex of claim 68, wherein the receptor complex further comprises an affinity tag, label, chemical moiety, toxin, biotin/avidin label, radionuclide, enzyme, substrate, cofactor, inhibitor, fluorescent marker, chemiluminescent marker, toxin, cytotoxic molecule or an immunoglobulin Fc domain.

70. The isolated soluble cytokine receptor polypeptide receptor complex of claim 68, wherein the receptor complex binds IL-TIF (SEQ ID NO:15) or antagonizes IL-TIF activity.

71. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of: (a) amino acid residues 21 to 231 of SEQ ID NO:2, (b) amino acid residues 22 to 231 of SEQ ID NO:2, and (c) amino acid residues 1 to 231 of SEQ ID NO:2.

72. The isolated polypeptide of claim 71, wherein the polypeptide consists of an amino acid sequence selected from the group consisting of: (a) amino acid residues 21 to 231 of SEQ ID NO:2, (b) amino acid residues 22 to 231 of SEQ ID NO:2, and (c) amino acid residues 1 to 231 of SEQ ID NO:2.

73. An isolated polypeptide consisting of an amino acid sequence selected from the group consisting of: (a) amino acid residues 21 to 210 of SEQ ID NO:2, (b) amino acid residues 22 to 210 of SEQ ID NO:2, (c) amino acid residues 22 to 108 of SEQ ID NO:2, (d) amino acid residues 112 to 210 of SEQ ID NO:2, and (e) amino acid residues 21 to 110 of SEQ ID NO:2.

74. A fusion protein, comprising the polypeptide of claim 71, wherein the fusion protein binds IL-TIF (SEQ ID NO:15) or antagonizes IL-TIF activity.

75. The fusion protein of claim 74, wherein the fusion protein further comprises an immunoglobulin moiety.

76. A fusion protein, comprising the polypeptide of claim 72.

77. The fusion protein of claim 76, wherein the fusion protein further comprises an immunoglobulin moiety.

78. A fusion protein, comprising the polypeptide of claim 73.

79. The fusion protein of claim 78, wherein the fusion protein further comprises an immunoglobulin moiety.

80. The isolated polypeptide of claim 71, wherein the polypeptide further comprises an affinity tag, label, chemical moiety, toxin, biotin/avidin label, radionuclide, enzyme, substrate, cofactor, inhibitor, fluorescent marker, chemiluminescent marker, toxin, cytotoxic molecule or an immunoglobulin Fc domain

81. The isolated polypeptide of claim 72, wherein the polypeptide further comprises an affinity tag, label, chemical moiety, toxin, biotin/avidin label, radionuclide, enzyme, substrate, cofactor, inhibitor, fluorescent marker, chemiluminescent marker, toxin, cytotoxic molecule or an immunoglobulin Fc domain

82. The isolated polypeptide of claim 71, wherein the polypeptide binds IL-TIF (SEQ ID NO:15) or antagonizes IL-TIF activity.

83. The isolated polypeptide of claim 80, wherein the polypeptide binds IL-TIF (SEQ ID NO:15) or antagonizes IL-TIF activity.

84. The isolated soluble cytokine receptor polypeptide of claim 47, wherein the receptor complex binds IL-TIF (SEQ ID NO:15) or antagonizes IL-TIF activity.

85. The isolated soluble multimeric soluble receptor complex of claim 51, wherein the receptor complex binds IL-TIF (SEQ ID NO:15) or antagonizes IL-TIF activity.